

Appl. No. : **10/700,971**
Filed : **November 4, 2003**

AMENDMENTS TO THE CLAIMS: This listing of claims replaces all prior versions and listings of claims in the instant patent application.

Listing of claims:

1. (Original) A composition comprising:
a first oligomeric compound and a second oligomeric compound,
wherein at least a portion of said first oligomeric compound is capable of hybridizing with at least a portion of said second oligomeric compound,
wherein at least a portion of said first oligomeric compound is capable of hybridizing to a target nucleic acid, and
wherein at least one of said first and said second oligomeric compounds comprises at least one conjugate moiety.
2. (Currently Amended) The ~~oligonucleotide~~ composition of claim 1 wherein said first and said second oligomeric compounds form a complementary pair of siRNA oligonucleotides.
3. (Original) The composition of claim 1 wherein said first and said second oligonucleotides comprise an antisense/sense pair of oligonucleotides.
4. (Original) The composition of claim 1 wherein each of said first and second oligomeric compounds comprises 10 to 40 nucleotides.
5. (Original) The composition of claim 1 wherein each of said first and second oligomeric compounds comprises 18 to 30 nucleotides.
6. (Original) The composition of claim 1 wherein each of said first and second oligomeric compounds comprises 21 to 24 nucleotides.
7. (Original) The composition of claim 1 wherein said first oligomeric compound comprises an antisense oligonucleotide.

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8. (Original) The composition of claim 7 wherein said second oligomeric compound comprises a sense oligonucleotide.
9. (Original) The composition of claim 7 wherein said second oligomeric compound comprises an oligonucleotide having a plurality of ribose nucleotide units.
10. (Original) The composition of claim 1 wherein said first oligomeric compound comprises said at least one conjugate moiety.
11. (Original) The composition of claim 1 wherein said second oligomeric compound comprises said at least one conjugate moiety.
12. (Original) The composition of claim 1 wherein said first and second oligomeric compounds each comprises at least one conjugate moiety.
13. (Original) The composition of claim 1 wherein said second oligomeric compound comprises at least one conjugate moiety and said first oligomeric compound comprises no conjugate moiety.
14. (Original) The composition of claim 13 wherein said second oligomeric compound comprises a sense oligonucleotide.
15. (Original) The composition of claim 1 wherein said at least one conjugate moiety is attached to an internal residue of said first or second oligomeric compounds.
16. (Original) The composition of claim 1 wherein said at least one conjugate moiety is attached to a terminal residue of said first or second oligomeric compounds.
17. (Original) The composition of claim 16 wherein said terminal residue is at the 5' end of said first or second oligomeric compounds.

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18. (Original) The composition of claim 1 wherein said conjugate moiety is attached to a heterocyclic base moiety of said first or second oligomeric compounds.
19. (Original) The composition of claim 1 wherein said at least one conjugate moiety is attached to a monomeric subunit of said first or second oligomeric compounds.
20. (Original) The composition of claim 1 wherein said at least one conjugate moiety is attached to a monomeric subunit linkage of said first or second oligomeric compounds.
21. (Original) The composition of claim 1 wherein said at least one conjugate moiety is attached to said first or second oligomeric compounds through a linker.
22. (Original) The composition of claim 1 wherein said at least one conjugate moiety is a lipophilic moiety, vitamin, polymer, peptide, protein, nucleic acid, small molecule, oligosaccharide, carbohydrate cluster, intercalator, minor groove binder, cleaving agent, or cross-linking agent.
23. (Original) The composition of claim 1 wherein said at least one conjugate moiety is a steroid.
24. (Original) The composition of claim 1 wherein said at least one conjugate moiety is cholesterol or a cholesterol derivative.
25. (Original) The composition of claim 1 wherein said at least one conjugate moiety binds to low-density lipoprotein.
26. (Original) The composition of claim 1 wherein said at least one conjugate moiety is folate or folate derivative.
27. (Original) The composition of claim 1 wherein said at least one conjugate moiety is a water-soluble polymer.

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28. (Original) The composition of claim 1 wherein said at least one conjugate moiety comprises polyethylene glycol or copolymer thereof.

29. (Original) The composition of claim 1 wherein said at least one conjugate moiety comprises a fusogenic peptide or delivery peptide.

30. (Original) The composition of claim 1 wherein said at least one conjugate moiety comprises a nuclear export signal.

31. (Original) The composition of claim 1 wherein said at least one conjugate moiety comprises a nucleic acid.

32. (Original) The composition of claim 1 wherein said at least one conjugate moiety comprises a drug.

33. (Original) The composition of claim 1 wherein said at least one conjugate moiety binds to human serum albumin.

34. (Original) The composition of claim 1 wherein said at least one conjugate moiety comprises a reporter group.

35. (Original) The composition of claim 1 wherein said at least one conjugate moiety localizes said first oligomeric compound, said second oligomeric compound, or both to the cytoplasm of a cell.

36. (Original) The composition of claim 1 wherein said at least one conjugate moiety enhances the pharmacokinetic or pharmacodynamic properties of said composition.

37. (Original) The composition of claim 1 wherein said composition has improved cellular uptake properties compared with the same composition having no conjugate moiety.

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38. (Original) A composition comprising,
a first oligomeric compound capable of hybridizing to a target nucleic acid,
optionally a second oligomeric compound hybridizable to said first oligomeric compound;
at least one protein, said protein comprising at least a portion of a RNA-induced silencing
complex (RISC),
wherein said composition comprises at least one oligomeric compound comprising at
least one conjugate moiety.
39. (Original) The composition of claim 38 wherein said first oligomeric compound
comprises an antisense oligonucleotide.
40. (Original) The composition of claim 38 wherein said first oligomeric compound
comprises 10 to 40 nucleotides.
41. (Original) The composition of claim 38 wherein said first oligomeric compound
comprises 18 to 30 nucleotides.
42. (Original) The composition of claim 38 wherein said first oligomeric compound
comprises 21 to 24 nucleotides.
43. (Original) The composition of claim 38 comprising said second oligomeric compound.
44. (Original) The composition of claim 43 wherein said second oligomeric compound
comprises a sense oligonucleotide.
45. (Original) The composition of claim 43 wherein said second oligomeric compound
comprises an oligonucleotide having a plurality of ribose nucleotide units.
46. (Original) The composition of claim 43 wherein said first oligomeric compound
comprises said at least one conjugate moiety.

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47. (Original) The composition of claim 43 wherein said second oligomeric compound comprises said at least one conjugate moiety.

48. (Original) The composition of claim 43 wherein said first and second oligomeric compounds each comprises at least one conjugate moiety.

49. (Original) The composition of claim 43 wherein said second oligomeric compound comprises at least one conjugate moiety and said first oligomeric compound comprises no conjugate moiety.

50. (Original) The composition of claim 38 wherein said at least one conjugate moiety is attached to an internal residue of said first or second oligomeric compounds.

51. (Original) The composition of claim 38 wherein said at least one conjugate moiety is attached to a terminal residue of said first or second oligomeric compound.

52. (Original) The composition of claim 51 wherein said terminal residue is at the 5' end of said first or second oligomeric compound.

53. (Original) The composition of claim 38 wherein said conjugate moiety is attached to a heterocyclic base moiety of said first or second oligomeric compound.

54. (Original) The composition of claim 38 wherein said at least one conjugate moiety is attached to a monomeric subunit of said first or second oligomeric compound.

55. (Original) The composition of claim 38 wherein said at least one conjugate moiety is attached to a monomeric subunit linkage of said first or second oligomeric compounds.

56. (Original) The composition of claim 38 wherein said at least one conjugate moiety is attached to said first or second oligomeric compounds through a linker.

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57. (Original) The composition of claim 38 wherein said at least one conjugate moiety is a lipophilic moiety, vitamin, polymer, peptide, protein, nucleic acid, small molecule, oligosaccharide, carbohydrate cluster, intercalator, minor groove binder, cleaving agent, or cross-linking agent.

58. (Original) The composition of claim 38 wherein said at least one conjugate moiety is a steroid.

59. (Original) The composition of claim 38 wherein said at least one conjugate moiety is cholesterol or a cholesterol derivative.

60. (Original) The composition of claim 38 wherein said at least one conjugate moiety binds to low-density lipoprotein.

61. (Original) The composition of claim 38 wherein said at least one conjugate moiety is folate or folate derivative.

62. (Original) The composition of claim 38 wherein said at least one conjugate moiety is a water-soluble polymer.

63. (Original) The composition of claim 38 wherein said at least one conjugate moiety comprises polyethylene glycol or copolymer thereof.

64. (Original) The composition of claim 38 wherein said at least one conjugate moiety comprises a fusogenic peptide or delivery peptide.

65. (Original) The composition of claim 38 wherein said at least one conjugate moiety comprises a nuclear export signal.

66. (Original) The composition of claim 38 wherein said at least one conjugate moiety comprises a nucleic acid.

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67. (Original) The composition of claim 38 wherein said at least one conjugate moiety comprises a drug.

68. (Original) The composition of claim 38 wherein said at least one conjugate moiety binds to human serum albumin.

69. (Original) The composition of claim 38 wherein said at least one conjugate moiety comprises a reporter group.

70. (Original) An oligomeric compound comprising a first region and a second region,
wherein said first region is capable of hybridizing with said second region,
wherein a portion of said oligomeric compound is capable of hybridizing to a target
nucleic acid, and
wherein said oligomeric compound further comprises at least one conjugate moiety.

71. (Original) The oligomeric compound of claim 70 wherein each of said first and said second regions comprise at least 10 nucleotides.

72. (Original) The oligomeric compound of claim 70 wherein said first region in a 5' to 3' direction is complementary to said second region in a 3' to 5' direction.

73. (Original) The oligomeric compound of claim 70 wherein said oligomeric compound comprises a hairpin structure.

74. (Original) The oligomeric compound of claim 70 further comprising a third region located between said first region and said second region.

75. (Original) The oligomeric compound of claim 74 wherein said third region comprises at least two oligomeric residues.

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76. (Original) The oligomeric compound of claim 74 wherein said oligomeric compound is RNA.

77. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety is attached to an internal residue of said oligomeric compound.

78. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety is attached to a terminal residue of said oligomeric compound.

79. (Original) The oligomeric compound of claim 78 wherein said terminal residue is at the 5' end of said oligomeric compound.

80. (Original) The oligomeric compound of claim 78 wherein said terminal residue is at the 3' end of said oligomeric compound.

81. (Original) The oligomeric compound of claim 70 wherein said conjugate moiety is attached to a heterocyclic base moiety of said oligomeric compound.

82. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety is attached to a monomeric subunit of said oligomeric compound.

83. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety is attached to an monomeric subunit linkage of said oligomeric compound.

84. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety is attached to said oligomeric compound through a linker.

85. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety is a lipophilic moiety, vitamin, polymer, peptide, protein, nucleic acid, small molecule, oligosaccharide, carbohydrate cluster, intercalator, minor groove binder, cleaving agent, or cross-linking agent.

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86. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety is a steroid.

87. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety is cholesterol or a cholesterol derivative.

88. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety binds to low-density lipoprotein.

89. (Original) The composition of claim 70 wherein said at least one conjugate moiety is folate and folate derivatives.

90. (Original) The composition of claim 70 wherein said at least one conjugate moiety is a water-soluble polymer.

91. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety comprises polyethylene glycol or copolymer thereof.

92. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety comprises a fusogenic peptide or delivery peptide.

93. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety comprises a nuclear export signal.

94. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety comprises a nucleic acid.

95. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety comprises a drug.

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96. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety binds to human serum albumin.

97. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety comprises a reporter group.

98. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety localizes said oligomeric compound to the cytoplasm of a cell.

99. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety enhances the pharmacokinetic or pharmacodynamic properties of said oligomeric compound.

100. (Original) The oligomeric compound of claim 70 wherein said at least one conjugate moiety improves cellular uptake of said oligomeric compound.

101. (Original) A pharmaceutical composition comprising the composition of claim 1 and a pharmaceutically acceptable carrier.

102. (Original) A pharmaceutical composition comprising the composition of claim 38 and a pharmaceutically acceptable carrier.

103. (Original) A pharmaceutical composition comprising the oligomeric compound of claim 70 and a pharmaceutically acceptable carrier.

104-109. (Cancelled)